

**Technical Document 1727** January 1990

# **Antisubmarine Warfare** (ASW) Lexicon

C. H. Gates



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#### ADMINISTRATIVE INFORMATION

This document was prepared with considerable and ongoing input from the antisubmarine (ASW) community to foster clear and consistent communications in ASW by Code 604, the Associate for ASW Architecture and Engineering, Naval Ocean Systems Center (NOSC), for the Space and Naval Warfare Systems Command.

The document is offered to the ASW community for their unrestricted application. Suggested additions, deletions, or other comments may be forwarded to NOSC Code 604, attention Cathy Gates.

Released by M. R. Akers, Head Associate for ASW Architecture and Engineering Under authority of F. E. Gordon, Head ASW Department

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#### ANTISUBMARINE WARFARE (ASW) DEFINITIONS

Acoustic Signature. The noise output characteristic of, and identification with, a specific noise source, e.g., the noise output of a particular class submarine.

Afternoon Effect. The daytime heating of the surface water which results in a reduction of sonar ranges usually in the afternoon.

Air Coordinator. An officer appointed by the Officer in Tactical Command (OTC) to perform air coordination duties specified by the OTC. The Air Coordinator (AC) is normally assigned to the Antiair Warfare Commander (AAWC) and may be the Antisubmarine Warfare Commander (ASWC).

Aircraft Control Unit. A unit with facilities and controllers for conducting aircraft control, and which exercises tactical control of aircraft or a unit.

Aircraft Operating Authority. The command exercising operational control of aircraft.

Air Watch Officer. An officer assigned to watchstanding duties on the staff of the Antisubmarine Warfare Commander (ASWC), and is responsible to the ASW Air Advisor for the employment of ASW aircraft.

Ambient Noise. The naturally occurring noise in the sea and the noise resulting from man's activity, excluding self-noise and reverberation.

Antisubmarine Warfare Commander. The officer delegated some or all of the OTC's (Officer in Tactical Command) detailed responsibilities for antisubmarine warfare; has the tactical control authority to accomplish the associated missions and tasks to carry out those responsibilities.

Architecture Development. Explore and develop theory and methodology to optimize warfare system architectures.

Architecture Methodology and Theory. Development of Measures of Performance (MOP), Measures of Effectiveness (MOE), and an algorithm and models for computer-assisted design and assessment of architectures.

Associated Support. An option in Nuclear Attack Submarine (SSN) Direct Support (DS) operations wherein the SUBOPAUTH retains tactical control of SSN(DS) units and coordinates the assignments and movements of submarines in response to the support requirements of the Officer in Tactical Command (OTC).

Astern Sector. In screening operations, the sector from 120 degrees clockwise to 240 degrees relative to the projected force track.

ASW Air Advisor. An officer assigned to the staff of an Antisubmarine Warfare Commander (ASWC). He is responsible for supervising the performance of assigned Air Watch Officers and subordinate watchstanders.

ASW Architecture (Warfare System Architecture). A framework of organizational structures and relationships that use resources to perform functions to achieve an objective or goal.

- a. Organization: Subdivision, unit, individual
- b. Resource: Physical systems, computers, people
- c. Function: Process, procedure, algorithm

Background Noise. All unwanted sounds, other than reverberation, received by a hydrophone, including ambient and selfnoise.

Baseline/Class One Architectures. Architectures dictated by systems presently planned or in development.

Best Depth Range. That predicted range an active sonar can expect against a submarine at 200 ft below the layer or at 1000-ft depth or at 5 ft above the bottom, whichever is the most shallow, in a given water column.

Bottom Bounce. A form of sound transmission in which sound rays strike the bottom and are reflected back toward the surface.

Cartesian Coordinate Grid. The grid used for rapid reporting of position in a form compatible with manual and Naval Tactical Data systems.

Cavitation. The formation of local cavities (bubbles) in a liquid as a result of the reduction of local pressure. This pressure reduction may result from a negative pressure produced by rarefaction, or from the reduction of pressure by hydrodynamic flow such as is produced by high-speed movement of an underwater propeller.

C3 Architecture. A blueprint or blueprints relating doctrine, procedures, processes, organizational structure, personnel, equipment, facilities, and communications that could provide authorities at all levels with timely and adequate data to plan actions, assess mission effectiveness, position and prepare own forces, acquire tactical information, evaluate situation, direct actions, and execute weapons actions.

C3 System. A subset of a C3 architecture that has directly measurable input/output attributes.

Cavitation Speed. The speed for an individual ship at which propeller blade cavitation is the predominant factor in the ship's acoustic signature. Choke Point. An area of navigable water where the selection of alternate routes is restricted by land mass or unnavigable water.

Clear Circuit. Unencrypted radio communications circuit.

Close Support Area. Area surface to unlimited as established by the Officer in Tactical Command (OTC).

Cold. Antisubmarine Warfare contact is not held; submerged contact known or assumed to be enemy (GOBLIN) is not held.

Communications Relay Aircraft. An aircraft tasked to relay communications from one unit to another, normally VHF/UHF voice relay.

Communications Security. Cryptosecurity, transmission security, emission security, and physical security of communications security materials and information.

Computer System Application Function. A systematic arrangement and execution of computer system organic functions to accomplish a system function.

Computer System Organic Function. The basic operations performed by computer systems regardless of the application in which the computer system is employed.

Contact Prosecution. The act of localizing submarines, then attacking and/or maintaining contact after achieving attack criteria.

Convergence Zone. That region in the deep ocean where sound rays, refracted from the depths, focus at the surface in successive intervals of 35 miles or less.

Correlation. The process of determining if two or more contact reports are associated with the same object.

Counterdetection. The act of detection by others of one's activity or operation (e.g., detection by enemy submarines of own-force active sonar).

Cross-fix. The act of determining the position of objects (usually ships) by lines of bearing from different locations at about the same time.

Datum. The last known position of a submarine, or suspected submarine, after contact has been lost.

Datum Error. An estimate of the degree of accuracy in the reported position of datum.

Datum Time. Time when contact with the submarine, or suspected submarine, was lost.

Decibel (dB). A value that expresses the comparison of two sounds of different intensities. This value is defined as 10 times the common logarithm of the ratio of the two sound intensities.

Defensive Perimeter. In screening operations, the perimeter encompassing the main body wherein the expected threat for which the screen was designed is not permitted to penetrate without being detected and opposed.

Deliberate Attack. An attack delivered with maximum accuracy against an enemy submarine when the tactical situation allows time to obtain accurate track data.

Delousing. Searching in the vicinity of the task force main body to detect any potentially hostile submarines.

**DIFAR.** The technique that employs passive directional sonobuoys to provide target detection, classification, and bearing.

Dogbox. Area within which units may interfere with, or be endangered by, own ASW torpedoes. Defined as a circle of radius 2000 yards with 6-minute duration.

**DOWNLINK.** Communications directed to a submerged (below periscope depth) submarine from surface or air units.

**EARDRUM**. Call sign for aircraft assigned to relay SSN in area support communications to OTC/ASWC.

Echo Level. In active sonar, the level or strength of a returning echo over a given range expressed in decibels referenced to 1 micropascal (dB/1  $\mu$ Pa).

Emission Control. The management of all electromagnetic and electroacoustic emissions of a force or unit.

Estimated Position. The refinement of datum to reflect additional information concerning the likely position of a submarine, or suspected submarine, but insufficient to define the exact current position or a new datum.

Figure of Merit. The maximum propagation loss in dB that a target signal can undergo and still be detected 50 percent of the time by the Sonar Operator.

Flaming Datum. A datum established by a submarine's attack on a ship vice contact on the submarine with the datum position being the ship's position at the time of attack; datum error being the estimated firing range of the submarine's weapon, and the datum time being the time of the attack.

Flank. In screening operations, the sectors from 240 to 300 degrees and 60 to 120 degrees clockwise relative to the projected force track.

Functional Superset. A set of functions with the following characteristics: unambiguously defined; nonredundant and mutually exclusive; groupable into subsets which satisfy the requirements of a particular commander or set of commanders associated with a command level or platform; when aggregated, they span the total functionality required to meet the warfare requirements.

Farthest-on-Circle. An expanding circle centered on a datum or search center of which the radius at any one time is a command estimate of maximum submarine travel from datum plus datum error.

Fusion (data fusion). The combining of dissimilar information into a new complex product.

Future/Class Three Architectures. Systems that could be deployed, with some technical risk, in the future.

GOBLIN. Submerged contact assumed to be enemy submarine.

Gradient. The rate of change of an environmental variable over a given distance. In the sea, for example, a temperature gradient is the change of temperature with depth. The temperature gradient is positive if temperature increases with depth.

Grid Guard. That unit to whom the OTC has delegated responsibility for the accuracy and security of the current grid in force.

GUERRILLA. A priority collective sign indicating an SSN(DS) has high-precedence traffic to communicate to the OTC/ASWC. Any unit receiving this call is to reply, authenticate if necessary, and relay. This call sign is used to break into a circuit being used for other high-precedence traffic.

HOT. Contact on GOBLIN: GOBLIN is held.

Identification Safety Range. A range established to ensure that an aircraft does not enter the gun or missile engagement zone of a surface force until it is recognized as friendly.

Inner Screen. A screen in the immediate vicinity of the main body, generally within UHF range of the main body.

Integrated Acoustic Communications System. Provides a capability for realtime, low-data rate, acoustically overt, tactical communications between appropriately equipped submarines, surface ships, and aircraft (via a buoy) at ranges to 40 miles.

Integrated Analysis Technique/Structured Analysis Tool. Computer-assisted system

engineering tools for architectural design and evaluation.

Integrated ASW Plan. A statement of ASW policy, intended employment of ASW assets, and contact response instructions. It is published by the OTC in the operation order and based on the recommendation of the ASWC.

Integrated Support. An option in SSN Direct Support (DS) operations wherein the OTC has tactical command of assigned SSN(DS). The OTC is assigned an area cleared of other friendly submarines by the SUBOPAUTH. Within this cleared area (Integrated Support Area), the OTC positions the SSNs and is responsible for preventing mutual interference among the assigned SSN(DS) as well as providing for their safety from attack by friendly forces. These responsibilities are delegated to an ASWC when assigned.

Integrated Support Area. A geographic submarine operating area allocated to the OTC by the SUBOPAUTH wherein the OTC operates as signed SSN(DS).

Joint Force Integration. Integrate architectural methodology with current and proposed architectural efforts of other services.

Killing Ground. That area between the inner screen and Submarine Patrol Areas in the outer screen where antisubmarine attacks are planned.

King Pin. A reference position established arbitrarily by an aircraft for reporting the position of contacts or datum.

Limiting Lines of Approach (LLA). Mathematically calculated limits, relative to the force within which an attacking submarine must be to reach the Torpedo Danger Zone.

Limiting Lines of Quiet Approach. LLA for a nuclear submarine at quiet speeds.

Limiting Lines of Submerged Approach. LLA for submerged diesel-electric submarine at quiet speed (10 knots). Linebacker. A surface ASW ship assigned a communication circuit for ease of reference and clarity.

Localization. The determination of a contact's position by reducing the general area of contact to a more definite and smaller area.

LOFAR. The technique that employs passive nondirectional sonobuoys to provide target detection and classification.

Main Body. A group of warships and naval auxiliaries, or a single ship escorted by warships and/or aircraft, and not designated a convoy.

MAD (magnetic anomaly detector). An active device that detects the presence of a magnetic material by the distortions such material produces in the natural magnetic field of the depth.

Maritime Patrol Aircraft. All current types of maritime land-based planes, excluding those unarmed multiengine aircraft used for utility and transport service, that have the capability to operate over the sea environment.

Marking. The act of maintaining a continuous readiness to deliver weapons against a specific target without further localization or weapon preparation.

Maximum Effective Torpedo Firing Range. The maximum distance at which a torpedo may be fired with a reasonable probability of achieving the desired result (assessed as 10,000 yards).

Measure of Effectiveness. Measurable attributes of system performance within an operational environment, e.g., probability of detection of enemy submarines.

Measure of Force Effectiveness. Measurable attributes of mission performance, e.g., number of hostile forces eliminated.

Measure of Performance. Measurable attributes (numerical) of system performance, e.g., mean time to failure.

Median Detection Range. A term used within the air ASW community to describe that continuous range at which there is a 50-percent probability of detection on any one sonobuoy of the signal source for which the computation is made.

Mobile Exercise Area. A moving area of specified dimensions established around a submarine, or surface ship, extending about the estimated position along the track, and designated only in peacetime for use in transit by a submarine to prevent or minimize interference by friendly forces.

**NESTOR.** A UHF voice communications encryption system.

Noise Limited. That situation in which the maximum range of detection is limited by that part of background noise and own-ship noise detected by the sonar.

NOTACK Area. A special weapon-tight haven within an SSN Patrol Area. An established "no attack" area inside the SSN Patrol Area.

Operational Control. The authority delegated to a commander to direct forces assigned so the commander may accomplish specific missions or tasks usually limited by function, time, or location; to deploy units concerned; and to retain or assign tactical control of those units. It does not include the authority to assign separate employment of components of the units concerned, nor does it include administrative or logistic control.

**OPGEN ALFA.** A message format for distribution of general information by the OTC to all units and appropriate shore authorities.

OPGEN FOXTROT. A message format for helicopter tasking by the Air Coordinator to the warfare commanders, Screen Commander, carriers, helicopter-equipped ships, and screen ships.

OPGEN GOLF. A message format for issuing ASW policy by the ASWC to all ships and air squadrons in a Battle Group.

OPGEN HOTEL. A message format for ships with helicopters embarked or with air control capability to state their availability to the OTC and AC.

**OPGEN SIERRA**. A message format for the OTC/ASWC to distribute essential information to SSN(DS).

OPGEN TANGO. A message format for exchange of ASW scene of action information.

Optimum Sonar Speed. The speed for an individual surface ship at which, over a period, it can achieve the maximum sweep area with its sonar in the prevailing environmental conditions.

ORESTES. An HF radio teletype communications encryption system.

Outer Screen. A screen removed from the main body, generally beyond UHF range of the main body, and forms the outer defensive perimeter.

Periscope Depth Range. That predicted range an active sonar can expect against a submarine at 60-ft keel depth in a given water column.

Plan Black. The intended employment of units immediately after contact is lost.

Plan Red. The intended employment of units as soon as contact is gained.

Position and Intended Movement. A reference position established by the OTC at a given time and a forecast of the course(s) and speed(s) expected to be made good over the ground.

Possible Submarine. A contact for which there is some information available that indicates the likely presence of a submarine, but insufficient evidence to justify a higher classification.

**POUNCER.** A ship or helicopter tasked to localize and/or attack submarines once contact is gained.

Predicted Sonar Range (PSR). The range estimated by consideration of factors that influence the propagation of sound, such that target returns will be identified by an average, unalerted sonar operator 50 percent of the time. For passive search, the definition implies the range at which the maximum allowable propagation loss the target signal can suffer and still be detected by the operator 50 percent of the time. At all lesser ranges, the target will be detected at least 50 percent of the time. Convergence zone and bottom bounce detection ranges are included within PSR only if detection capability is continuous at lesser ranges.

**Probable Submarine.** A contact that displays strong cumulative evidence of being a submarine.

Procedure ALFA. A procedure whereby a detaching Surface Attack Unit (SAU) retains and employs an ASW circuit for its exclusive use for the investigation/prosecution of its contact, and the SAU and the screen ships are not required to shift frequencies to SCREEN TACTICAL.

Procedure BRAVO. An optional procedure whereby a detaching Surface Attack Unit (SAU) retains and employs SCREEN TACTICAL for its exclusive use for the investigation/ prosecution of its contact, and the remaining screen ships will be ordered to shift to SCREEN TACTICAL ALFA UHF.

Prudent Limit of Endurance. The time an aircraft can remain airborne and still retain a given safety margin of fuel.

Radar Flooding. A continuous all-around use of radar.

Restricted Water. Navigable waters where operations are significantly affected by water

depth, the proximity of land, or unnavigable water.

Reverberation. The combined sound of many small echoes returned to the hydrophone by surface, bottom, and volume scattering.

Reverberation Limited. A description of the condition in active sonar when the reverberation interference level is higher than the background noise level.

Read. Axis of a sonobuoy pattern.

Scene of Action Commander. The officer who temporarily assumes tactical command in a limited area as a result of contact with the enemy.

Search Attack Unit. The designation given to a unit separately organized or dispatched from a formation to search for and attack submarines.

Secure Circuit. An encrypted communications circuit.

SEC Watch Officer. An officer assigned to watchstanding duties on the staff of the ASWC and responsible to the Submarine Element Coordinator (SEC) for the employment of SSN(DS).

Self-Noise Limited. The condition when the component of acoustic background noise generated by the listening ship is the predominant source of background noise.

Shadowing. The observation of an enemy unit or force, usually as a sequel to surveillance or reconnaissance, for the purpose of reporting its composition, location, movement, and any other relevant information.

Shadow Zone. In the ocean, a space of reduced ensonification bounded by the limiting ray and surface layer boundary.

Shallow Water. Water of such depth that the proximity of the bottom has significant impact

on operations or performance. Defined to be 100 fathoms or less.

SIMAS. An automated computer acoustic prediction system.

SINKER. A radar contact that later disappeared.

Situation ALFA. A command relationship ordered by the common superior of a support force and another force whereby the two forces integrate and the senior officer present becomes the OTC of the combined force.

**Situation BRAVO.** A command relationship ordered by the common superior of a support force and another force whereby the support force provides direct support and the senior OTC of the two forces coordinates the tactical operations of the two forces.

Situation CHARLIE. A command relationship ordered by the common superior of a support force and another force whereby the support force commander has discretion how best to provide support.

**Snorkel** (SNORT). An extendable breather pipe that enables a submarine to operate on diesel engines while remaining submerged.

Sonobuoy. A free floating or anchored device consisting of a buoy, radio telemetering equipment, and a hydrophone. The hydrophone receives signals that are then transmitted to a receiver for analysis.

Source Level. Sound pressure measured 1 yard from the source and expressed in dB referenced to one micropascal  $(dB/1\mu Pa/yd)$ .

SSN Control Ship. That ship from which tactical control of the SSN(DS) is exercised by the ASWC.

SSN(DS) Station. The area defined inside an SSN Patrol Area within which the SSN(DS) is expected to conduct search operations.

SSN Patrol Area. The assigned area established by the ASWC (Integrated Support) or SUBOPAUTH (Associated Support) wherein

SSN(DS) is constrained to operate. Within the rules of the Patrol Area, the SSN(DS) may operate without interference from an attack by friendly forces.

Submarine Element Coordinator. The principle advisor, for submarine matters, to the commander exercising tactical control over SSNs in the Direct Support role.

Submarine Intended Movement. A reference point defining a geographic position and movement.

Submarine Notice. A message report originated by a Submarine Operating Authority (SUBOPAUTH) providing movement information by which submarines are routed in peace and war and including transit and patrol zone information.

Submarine Operating Authority (SUB-OPAUTH). Title used to indicate the command exercising operational control over submarines.

Surface Action Group. A unit of surface ships, which may be supported by fixed-wing aircraft or helicopters, formed to counter a surface threat.

Surveillance Area. The air space in an AAW area in which detection, tracking, and identification of an air threat takes place.

**SWAP.** The executive order for exchange of the duty of Scene-of-Action Commander from one unit to another.

System Engineering. The systematic application of technology and engineering principles to optimize the performance of an architecture within specified constraints of time and money.

System Function. The process by which personnel, with computer systems or computer systems alone, support accomplishment of an operational function.

Tactical Picture. The past and present position and identification of all air, surface, and subsurface platforms in the tactical area of interest. The description of the environment in the tactical area of interest, specifically, Eland masses, bottom contours, present atmospheric and oceanographic conditions.

Tactical Situation. The interpretation of the tactical picture in light of the assessment of enemy posture and own-force posture. Posture includes examination and assessment of the operational capability, tactics, vulnerabilities, intentions, and operational effectiveness.

Tactical Sonar Range. A range based on the reported SRs and may make allowances for probable submarine depth, alertness of operators, level of unit efficiency, etc.

Target Motion Analysis. The examination of target bearing information to localize the target.

Technical Review and Integration. Provide top-level review of architectural design methodology and products; evaluate efforts for consistency with other naval force level architectures and appraisals.

Torpedo Countermeasure. The material and tactical measures that are adopted by ships for protection against submarine torpedoes.

Torpedo Danger Area. The area extending beyond the farthest-on-circle for an arbitrarily assessed distance of 8000 yards.

Torpedo Danger Zone. An area in which the submarine must enter to be within maximum effective torpedo firing range.

Towed Array. Two or more hydrophones feeding into a common receiver from a configuration pulled astern by a surfaced or submerged platform. Towed arrays are classified as tactical, in which case they have the capability of being towed at near maximum platform speeds, or classified as surveillance, in which case they are towed at slow speeds.

**Tracking.** Estimation of an object's position in space.

Track Integration. The merging of tracks from multiple sources into a composite track picture.

**UPLINK**. Communications directed to surface or air units from a submerged (below periscope depth) submarine.

Urgent Attack. An attack delivered with maximum rapidity against an enemy submarine located in a position that is considered an immediate threat.

Van. In screening operations, the sector from 300 to 60 degrees clockwise relative from the projected force track.

Variable Depth Sonar. A sonar whose transducer is towed beneath its parent ship to improve sonar detection ranges.

Vectored Attack. An attack in which a weapon-carrying unit not holding contact on the target is vectored to the weapon delivery point by a unit that holds contact on the target.

Vectored Intercept. The positioning of one or more SSN(DS) based on data gathered from other sources to intercept seaborne forces that pose a threat to the Task Group or other friendly forces.

Vital Area. The inner part of the destruction area, centered on the main surface units in

which the primary mission of the force depends, and within which no attackers should be allowed to penetrate without being engaged. The outer limit of the vital area is the assumed release point of enemy bombs and/or ASCM missiles.

Warfare Mission Areas. Antiair Warfare (AAW), Antisubmarine Warfare (ASW), Antisurface Warfare (ASUW), Amphibious Warfare (AMW), Electronic Warfare (EW), Strike Warfare (STW), Mine Warfare, Submarine Warfare, and Unconventional.

Warfare Mission Support Areas. Air resources coordination, C3 countermeasures, surveillance, reconnaissance, search and rescue, intelligence, operational deception, cryptologic communications, logistics, movement, disposition/formation/task organization, joining, rules of engagement, rules to prevent mutual interference, and defense/readiness conditions.

Warfare System. The assemblage of personnel, hardware, and software resources of a naval activity (platform or shore site) operating in a prescribed manner to fulfill the warfare mission requirements of the activity.

Weapon Release Point. The point where a single weapon, on the first weapon fix of a pattern, is released so it enters the water at the splash point. For aircraft attacks, it allows for the aircraft's direction, speed, and altitude of approach and the characteristics of the weapon.

# OVER-THE-HORIZON TARGETING (OTH-T) DEFINITIONS

Battle Damage Information. The efficiency of providing battle damage information to the decision maker.

Classification. The ability of a sensor or source to correctly identify targets detected.

Completeness. The sufficiency of information forwarded based upon reports received.

Consistency of Tactical Picture. The consistency of a decision-maker's or launch platform's tactical picture as compared to the afloat correlated product.

Data Element. Individual and specific information elements necessary to arrive at a quantitative value for an MOE (Measures of Effectiveness).

Detection. The availability of a sensor or source to detect and maintain contact given a detection opportunity.

Detection Opportunity. Any 30-minute period of an exercise when a given sensor has had no contact with a target for 30 minutes and all of the following conditions are met:

- a. Sensor with propagation path of emission, includes horizon limits for Line-of-Sight (LOS) detections.
- Signal/noise ratio of signal at sensor is within engineering specifications.
- c. Other sensor engineering specifications permit reception of signal (NOTE: Sensor OFF, wrong MODE, band, direction, etc., do not apply).
- d. If passive sensor, following minimum time (duration) of signal emission is required: Shore HFDF-10 minutes, SELOR-1 minute, ELINT ESM-1 minute,

OUTBOARD-2 minutes, Acoustic-2 minutes.

e. If OUTBOARD, source <150 NM from signal.

Engagement Envelope. An area described by a 50-NM radius around an intended OTH-T target.

Exercise Area. The geographical area designated by the Officer Conducting the Exercise as the bounds in which the exercise will be conducted.

Geographical Accuracy. The ability of a sensor or source to geographically locate targets and nontargets.

Ground Truth Position. The most accurate reconstructed position or track available as a result of an examination of all available geolocational sources.

Information Correlation. The results of a processing center's efforts to correlate information.

Integrated Acoustic Communications System. Provides a capability for realtime, low-data rate, acoustically overt, tactical communications between appropriately equipped submarines, surface ships, and aircraft (via a buoy) at ranges to 40 miles.

Killing Ground. That area between the inner screen and Submarine Patrol Areas in the outer screen where antisubmarine attacks are planned.

Loading. The volume of reports originated or received by a sensor/source, communications link, processing center, or data/tracking system.

MOE Areas ROFs. Areas of functions necessary for the OTH-T System to support an operational commander's use of ASUW OTH-T as an at-sea operation.

Navigation Accuracy. The sufficiency of selflocational information.

Operational Availability. The operational time an accessed system is available to support OTH-T.

OTH-T. The process of detection, classification, tracking, and targeting at over-thehorizon ranges.

OTH-T Data Base. An ORACLE OTH-T data base developed by the Naval Ocean Systems Center that accepts specified OTH-T data elements and MOEs and provides computer-assisted computation of MOEs.

OTH-T System. The collective whole of sensors (organic and nonorganic), processing centers (shore and afloat), communications links and interfaces, and weapons control systems that contribute to OTH-T.

OTH-T Weapons Area. An area described by the radius from a surface or subsurface OTH-T weapon platform of the maximum operational range of a particular OTH-T weapon plus a 50-NM buffer.

Report Interoperability. The ability of a node or communications link to accept OTH-T reports automatically without manual processing or creation of duplicate reports.

Surface Classification. The determination of a surface contact's status as a target or nontarget.

Surface Classification Report. A sensor or source report that contains a determination of at least target/nontarget classification

(designation, name, ship/radar type, etc.) or maintains continuity on a track previously designated a target or nontarget, including High-Interest Track (HIT) notation.

Surface Target. A surface platform designated by the Officer in Tactical Command as a Critical Contact of Interest or as a Contact of Interest.

System Access. The time a sensor, source, or communication link is made available by its control authority when tasked by the operational authority.

Target Acquisition Quality/Source. The sufficiency of information for target acquisition and the determination of sensor contribution to targeting engagements.

Targeting Information Quality. The targeting quality of arriving reports at a weapons launch/targeting platform, data/tracking system as measured by individual informational elements of reports.

Timeliness. The time information remains in the node or communications link until forwarding or appropriate action is taken.

Tracking Picture Quality. The ability of a data/tracking system to maintain a presentation of locational information on units within a designated engagement envelope within the specified radius of uncertainty.

Valid Detection. A sensor report of target contact that locates the position contact within a 25-NM radius of the ground-truth position and does not include conflicting (false) classification data.

#### ASW ACRONYMS AND ABBREVIATIONS

## A

A2 Acoustic Analysis; Active Adjunct;

Advanced Active; Antiaircraft

A3 Antiaircraft Artillery

AABNCP Advanced Airborne Command Post

AACA Airborne ASW Coordination Aircraft

AAD Active Acoustic Device

AAG Amphibious Assault Group

AAIS Airborne Acoustic Intercept System

AAM Air-to-Air Missile

AAP Analytical Assessment Plan

AAS Activity Accreditation Schedule

AASMD Airborne Antiship Missile

Defense

AASWA Advanced ASW Avionics

AAW Antiair Warfare

AATC Airborne ASW Tactical

Coordinator

AAWC Antiair Warfare Commander

ABF Adaptive Beamformer

AC Air Coordinator; Alternating Current

A/C Aircraft

**ACAN** Acoustic Analyzer

ACC Acoustic Control Console

ACCS Afloat Command and Control

Subsystem

ACIMD Advanced Concept in Missile

Demonstration

**ACINT** Acoustic Intelligence

ACK Acknowledged

**ACLS** Automatic Carrier Landing System

**ACM** Acoustic Countermeasures

ACNO Assistant Chief of Naval

Operations

ACP Automated Computer Program

ACPA Adaptive Controlled Phased Array

Antenna

ACS Air Control Supervisor; Afloat

Correlation System

**ACTIV** Activate

ACU Aircraft Control Unit

AIROPAUTH Aircraft Operating

**Authority** 

A/D Analog-to-Digital

AD Air Data

AD/AC Automatic Detection/Automatic

Classification

ADAS Air Deployable Array System

ADBMS Acoustic Data Base Management

System

ADC Acoustic Device Countermeasure;

Acoustic Display Console

AD/CAC Automatic Detection/Computer-

Aided Classification

ADCAP Additional Capability Program

(Mk 48 Torpedo)

ADD Acoustic Deception Device

ADDS Applied Digital Data Systems

ADEC Adaptive Detection, Estimation

and Correlation

ADF Advanced Disk File

ADI Acoustic Data Interface; Air Defense

Initiative

ADL Auxiliary Display Logic

ADLIPS Automatic Data Link Plotting

System

ADM Advanced Development Model

ADP Acoustic Data Processing; Automatic

Data Processor/Processing

ADPS Automatic Data Processing System

ADPSP Automatic Data Processing

Supervisor

ADT Automatically Detect a Track

AE Acoustic Emission; Acoustic Evaluator

**AEPS** Automated Environmental

Prediction System

AERP Active Emission Receiver Processor

AFC Automatic Frequency Control

AFCS Antiship Missile Defense

AFD Amplitude-Frequency Designators

AFS Combat Stores Ship

AG Array Gain

AGC Automatic Gain Control

AGI Intelligence Collection Ship

AGL Above Ground Level

AGM Air-to-Ground Missile

AGOR Oceanographic Research Ship

AHRS Automatic Heading and Recording

System

AI Artificial Intelligence

AIAC Auto Initial/Auto Track AIC Airborne Information Correlation AIMC Auto Initiate/Manual Confirm AIP Automatic Input Processing AIR Acoustic Intercept Receiver AIRBAT Air Battle (Model) AIRTASK NAVAIR Task AIS Acoustic Intercept System AJ Antijam ALG Antisubmarine Rocket Launcher Group ALI Automatic Line Integration ALICE Adaptive Line Canceller and Enhancer ALP Air Liaison Party ALWT Advanced Lightweight Torpedo AM Amplitude Modulation **AMBIG** Ambiguity AMCM Airborne Mine Countermeasures AME Angle Measuring Equipment AMOS Acoustic Meteorological Ocean Survey AMS Advanced Missile System AMSS Advanced Multimission Sensor System A/N Alphanumeric AN Ambient Noise (Sonobuoys) **ANAL** Analysis ANK Alphanumeric Keyboard ANM Ambient Noise Measurement ANMCC Alternate National Military Command Center ANZUS Australia, New Zealand, United AOA Angle of Arrival; Amphibious Objective Area; Area of Activity AOE Fast Combat Support Ship AOI Area of Interest AOP Area of Probability; Accuracy of Position; Avionics Operational Program AOR Area of Responsibility; Replenishment Oiler AOU Area of Uncertainty AOUE Area of Uncertainty Factor APA Air Patrol Area APAIR ASW Program Air Engagement APBI Advanced Planning Briefings for

Industry

APCOA Actual Probability of Acquisition APL Applied Physics Laboratory APP Acoustic Performance Prediction APS Adaptive Processor Sonar APSUB ASW Program Subsurface APSURF ASW Program Surface APZ Air Patrol Zone AQD Additional Qualification Designation AREC Air Element Coordinator ARH Antiradiation Homing (Seeker) ARM Antiradiation Missile ARNAV Area Navigation ARO Auxiliary Readout ARPA Advanced Research Projects ARRCS Air Raid Reporting Control Ship AS Air to Surface ASAC Antisubmarine Air Controller ASAM Active Synthetic Aperture Radar Antiship Missile ASAS Antisubmarine Air Supervisor **ASC** Air Support Coordinator ASCAC Antisubmarine Classification and Analysis Center ASCL Advanced Sonobuoy Communication Link ASCM Antisubmarine Cruise Missile: Antisurface Cruise Missile; Air-to-Surface Cruise Missile ASE-MASE Automatic Signal Ejector-Modified Automatic Signal Ejector **ASIM** Antisubmarine Simulation Mode ASIO A-Scan Indicator Operator ASM Air-to-Surface Missile ASMD Antiship Missile Defense ASO Acoustic Sensor Operator ASP Advanced Signal Processor **ASPO** Acoustic Signal Processor Operator **ASPR** Armed Services Procurement Regulation **ASRAP** Acoustic Sensor Range Prediction ASRAPS Antisubmarine Range Prediction System **ASROC** Antisubmarine Rocket **ASSET AASMD Sensor Suite Evaluation** Technique ASST Antiship Surveillance and Targeting **ASTACS** Air ASW Tactical Support System

**ASUW** Antisurface Warfare ASUWC Antisurface Warfare Commander ASW Antisubmarine Warfare ASWC Antisubmarine Warfare Commander **ASWCS** Antisubmarine Warfare Control System **ASWCCS** Antisubmarine Warfare Command and Control System ASWCSI ASW Combat System Integration ASWE Antisubmarine Warfare Evaluator ASWFCO Antisubmarine Warfare Fire Control Officer **ASWIXS** Antisubmarine Warfare Tactical Information Exchange Subsystem ASWM Antisubmarine Warfare Module ASWMO Antisubmarine Warfare Module Officer **ASWMWO** Antisubmarine Warfare Module Watch Officer ASWO Antisubmarine Warfare Officer **ASWOC** Antisubmarine Warfare Operations Center **ASWS** Advanced Surveillance Workstation ASW/SOW Antisubmarine Warfare Standoff Weapon **ASWSP** Antisubmarine Warfare Systems **Project** ASWSSF Antisubmarine Warfare Software Support Facility **ASWTC** Antisubmarine Warfare Tactical Coordinator AT Acceptance Trials ATAC Air-Transportable Acoustic Communications (Buoy); Airborne Tactical Acoustic Communications ATACO Air Tactical Control Officer/Operator ATD Advanced Torpedo Decoy ATDS Advanced Tactical Data System ATE Automatic Test Equipment ATF Amphibious Task Force; Automatic Target Following ATLA Advanced Thin Line Array ATO Air/Airborne Tactical Officer ATP Allied Tactical Publications ATR Analog Tape Recorder

ATT Acoustic Target Tracker

AU Analyzer Unit AUTEC Atlantic Undersea Test and **Evaluation Center AUTODIN** Automatic Digital Information AUTOSEVOCOM Automatic Secure Voice Communications **AUTOVON** Automatic Voice Network **AUX** Auxiliary **AVOID** Avoidance AVTD Air Vehicle Technology Department **AVTR** Aviator AW Aviation Antisubmarine Warfare Operator AWC Air Warfare Control AWS Acoustic Warfare System AX Aviation Antisubmarine Warfare Technician AXBT Airborne Expendable Bathythermograph **AXP** Allied Exercise Publications

#### B

**BARSTUR** Barking Sands Tactical Underwater Range **BASIC** Basic Avionics System Integration **BATGAP** Battle Group ASW Performance Model **BATMAN** Battle Group Maneuvering Model BB Bottom Bounce; Broadband **BB/TCK** Bottom Bounce Track BB/TCK/ODT Bottom Bounce Track **Omnidirectional Transmission** BB/TCK/TF Bottom Bounce Track Triple Frequency BB/TF Bottom Bounce Triple Frequency **BC** Bearing Computer **B/CONF** Bearing/Confidence **BDA** Battle Damage Assessment **BDHI** Bearing Distance and Heading **Indicators BDI** Bearing Duration Indicator BDR Best Depth Range **BFA** Bearing Frequency Analysis **BFI** Bearing Frequency Indicator

**BG** Battle Group **BGC** Battle Group Commander **BIAS** Buoyant Integrated Antenna System **BIDMOD** Buoyfield Iterative Detection Model **BIP** Bits in Process BIS Board of Inspection and Survey **BITE** Built-In Test Equipment **BIU** Black Interface Unit **BLOS** Beyond Line of Sight **BOL** Bearing Only Launch **BPDMS** Basic Point Defense Missile System **BPS** Bits per Second B/R Bearing Rate; Propeller Blade Rate **BRG** Bearing **BRI** Bearing Recorder Indicator BRSR Bearing Rate Slide Rule **BSURE** Barking Sands Underwater Range Expansion BT Bathythermograph BTN Beam-Riding Terrier Missile (Nuclear Warhead) BTR Bearing Time Recorder **BVP** Beacon Video Processor BW Bandwidth

## C

C Speed of Sound Water C2 Command and Control C2S Command and Control System C3 Command, Control, and Communications C3CM Command, Control, and Communications Countermeasures C3I Command, Control, and Communications, Intelligence CA Configuration Audit CAC Computer-Aided Classification CAD/C Computer-Assisted Detection/Classification CAE Computer-Automated Engineering **CALC** Calculate CAO Cost Analysis Organizations CAP Combat Air Patrol CAPTOR Encapsulated Torpedo CAS Computer-Assisted Search

**CASE** Computer-Aided Systems Engineering **CASREP** Casualty Report CASS Command Activated Sonobuoy **CAT/CATEG** Category CCG Cartisian Coordinate Grid **CCM** Counter-Countermeasure CCS Combat Control System **CCSC** Cryptologic Combat Support Console **CCSIP** Combat Control System Improvement Program CCU Central Control Unit **CD** Counterdetection C&D Command and Decision System CDC Combat Direction Center; Central Data Controller **CDF** CWCS Development Facility CDP Contact Data Package CDPS Consolidated Decision Package Set CDS Combat Direction System CE Current Estimate CEB CNO Executive Board **CEP** Contact Evaluation Plot **CETS** Contractor Engineering Technical Services CFA Cognizant Field Activity CFR Cylinder Firing Rate CFSR Contract Funds Status Report **CFV** Control Formatting Unit CFY Current Fiscal Year CG Guided Missile Cruiser CGN Guided Missile Cruiser Nuclear CGX Future Guided Missile Cruiser CHIRP High Resolution Pulse Compression CHIP Change of Operating Procedure CI Contact Investigation; Configuration Item CIC Combat Information Center CICSUP Combat Information Center Supervisor CIDS Coordination in Direct Support CINC Commander in Chief CINCEUR Commander in Chief, U.S. Forces, Europe CINCLANT Commander in Chief, U.S. Forces, Atlantic

CINCLANTFLT Commander in Chief, U.S. Atlantic Fleet CINCPAC Commander in Chief, U.S. Forces, Pacific CIP Critical Intelligence Parameter CIT Command Interface Test; Controlled Interceptor Trainer CIWS Close-In Weapon System CJCS Chairman, Joint Chiefs of Staff **CLAMS** Countermeasure Launcher and Module System CLASS Classification (Ships) CLF Comparative LOFAR fixing CLG Guided Missile Light Cruiser CLI Communications Line Interface CLIPS Calculator Link Processing System CM Countermeasure; Cruise Missile CMD Command **CNCC** Communications Network Computer/Controller CND Chief of Naval Development CNO Chief of Naval Operations CNR Chief of Naval Research **CNOC** Commander Naval Oceanography Command **CO** Commanding Officer . COD Carrier On-Board Delivery CODAR Correlation Detection and Recording **COFIX** Comparative LOFAR Fixing **COMM** Communications

**COMM MSG** Communication Message **COMM PARAM Communications Parameter COMMSAT** Communications Satellite COMNAVSURFLANT Commander.

Naval Surface Force, U.S. Atlantic Fleet **COMPASS** Computer-Aided Surveillance Subsystem

**COMPATFOR** Commander Patrol Force **COMSEC** Communications Security COMSUB (LANT) Commander Submarine (Atlantic-Norfolk); (PAC) (Pacific-Pearl Harbor) COMSUBGRU Commander, Submarine Group

COMSUBLANT Commander, Submarine Force, U.S. Atlantic Fleet COMSUBPAC Commander, Submarine Force, U.S. Pacific Fleet CONPLAN Operation Plan in Concept **Format COPS** Computer-Oriented Partial Sum Beamformers **CORR** Correlation COSAL Consolidated Ship/Station Allowance List COTAC Co-Tactical; Co-TACCO (Tactical Coordinator) **COTD** Commanding Officer Tactical Display Operator CP Coded Pulse; Communications **Processor** CPA Closest Point of Approach CPAM CNO Program Analysis Memorandum CPCI Computer Program CI **CPCR** Computer Program Change CPD Cumulative Probability of Detection CPFF Cost Plus Fixed Fee CPIF Cost Plus Incentive Fee CPP Claimant Program Proposal CPPG CNO Policy and Planning

Guidance CPU Central Processing Unit C&R Coordination and Reporting **CR** Constant Resolution CRA Communications Relay Aircraft **CRATT** Covered Radio Teletype CRT Cathode Ray Tube CS Combat System; Computer Subsystem CSA Close Support Area CSC Combat System Coordinator **CSCG** Communications System Control Group CSDC Central Signal Data Converter CSDR Combat System Design

Requirement **CSE** Course **CSEDS** Combat System Engineering Development Site

CSP Changeable System Parameter CSR Crankshaft Rate CSRC Cryptologic Support Resource Console **CSS** Computer Subsystem **CST** Console Selected Target **CSTAP** CNO Studies and Analyses Program CT Combined Trials CTAL Crystal (XTAL) CTCZ Carrier Tactical Control Zone CTF Commander Task Force CTG Commander Task Group CTOL Conventional Takeoff and Landing CTS Course to Steer CTSDB Centralized Theater Surveillance Data Base CTSL Common Track Stores Locator CTU Commander Task Unit **CUDIXS** Common User Digital Information Exchange System CV Aircraft Carrier CVA Attack Aircraft Carrier CV/ASWM Carrier ASW Module CVBF Carrier Battle Force CVBG Carrier Battle Group CV-CS CV Combat System CVHG Helicopter and Guided Missile Aircraft Carrier CVIC Carrier Intelligence Center CVIC SUPPLOT Carrier Intelligence Center Supplementary Plot CVN Aircraft Carrier Nuclear: Multipurpose Aircraft Carrier (Nuclear-Powered) CVOS Carrier Operating System CVSG Guided Missile Antisubmarine Aircraft Carrier CVTSC Carrier-Based Tactical Support Center CW Continuous Wave

CWC Composite Warfare Commander

CWI Continuous Wave Illuminator

CZ Convergence Zone

CWCS Common Weapons Control System

CZR Convergence Zone Range CZW Convergence Zone Width

#### D

DA Developing Agency D/A Digital-to-Analog DAC Design Analysis and Commonality **DAMA** Demand Assigned Multiple **DAME** Distance and Altitude Measuring System; Distance/Azimuth Measuring Equipment DAMS Drum Auxiliary Memory Subunit **DARPA** Defense Advanced Research Projects Agency **DARS** Defense Acquisition Regulatory System DASG Digital Acoustic Signal Generator **DASS** Digital Acoustic Simulator System **DATS** Data Transmission System **DBM** Data Base Management DC Data Complete; Development Coordinator DCA Defense Communications Agency DCP Decision Coordinating Paper; Development Concept Paper DCS Defense Communications System DC&T Detection, Classification, and Targeting **DCU** Display Control Unit **DD** Destroyer D/D Digital to Digital D&D Display and Decision (Area of CIC) **DDC** Digital Data Computer **DDG** Guided Missile Destroyer **DDGX** Future Guided Missile Destroyer DDN Defense/Digital Data Network DE Data Element; Destroyer Escort; Decoder/Encoder D/E Diesel/Electric; Depression/Elevation **DECM** Defensive Electronic Countermeasures **DECPT MAN** Deceptive Maneuver **DEFCON** Defense Readiness Condition

**DEMON** Demodulated Noise

**DES** Data Encryption Standard

DF Direction Finder; Display Formatter

D&F Determination and Findings

**DGU** Display Generator Unit

DI Directivity Index

DIA Defense Intelligence Agency

**DICASS** Directional Command Activated

Sonobuoy System

**DIDP** Display Data Processor

DI/DU Data Input/Data User

**DIFAR** Directional Low Frequency

Analysis and Recording (LOFAR)

**DIHT** Data Input History Table

**DIMUS** Digital Multibeam Steering

DISMAC Digital Scene Matching and

Correlation

**DITEG** Digital Television Graphics

**DITS** Data Information Transfer System

DIU Digital Interface Unit

**DL** Directional Listening

**DLA** Defense Logistics Agency

DLC Directional Listening Control; Down

Link Communication

**DLCS** Data Link Communications System

**DLI** Deck-Launched Interceptor

**DLP** Director of Laboratory Programs

**DLPP** Data Link Preprocessor

**DLRP** Data Link Reference Point

**DM** Digital Memory

DM/SINS Dual Miniature/ Ships Inertial

Navigation System

DMA Defense Mapping Agency; Direct

Memory Access

DME Distance Measuring Equipment;

Distance Measurement Estimation

**DMP** Direct Measurement Program

DMS Data Multiplexer Subunit; Disk

Memory Set; Drum Memory System

**DMSO** Director Major Staff Office

**DMTC** Digital Magnetic Tape Controller

DMTU Digital Magnetic Tape Unit

DMU Digital Memory Unit; Data

Measurement Unit

**DMX** Demultiplexer

**DNCU** Data Net Control Unit

**DNL** Director of Navy Laboratories

DNPP Director, Navy Program Planning

**DNPPG** Department of the Navy Policy

and Planning Guidance

**DOD** Department of Defense

DON Department of the Navy

**DONPIC** Department of the Navy

Program Information Center

**DOP** Development Options Paper

**DOTS** Development Operational Tactical

System

**DP** Direct Path

DP&E Director, Planning and Evaluation

**DPS** Data Processing System

**DR** Dead Reckoning

**DRB** Defense Resources Board

**DRM** Direction of Relative Motion

**DRO** Data Readout

DRS Detection and Ranging Set

**DRT** Dead Reckoning Track

**DS** Direct Support

**DSA** Distant Support Area

**DSARC** Defense Systems Acquisition

Review Council

**DSB** Defense Science Board

**DSC** Deep Sound Channel

**DSCS** Defense Satellite Communications

System

DSL Deep Scattering Layer

DSM Data Storage Memory; Digital

Simulation Model

**DSMC** Defense Systems Management

College

**DSP** Defense Standardization Program

**DSSCS** Defense Special Security

Communications System

**DSSI** Digital Sector Scan Indicator

**DST** Destructor (Mine)

DT Data Transmission; Digital Tracker;

**Detection Threshold** 

DTAS Depressors to Towed Array Sonar

DTC Desk Top Computer/Counter

**DTD** Data Transport Device

DTDMA Distributive Time Division

Multiplier Access

DT&E Developmental Test and

**Evaluation** 

**DTG** Date-Time Group

DTIC Defense Technical Information

Center

DTL Direct Travel and Labor

**DTP** Design to Price

**DTS** Data Terminal Set

DTVPU Digital TV Projection Unit DVARS Doppler Velocity Altimeter Radar Set DVST Direct View Storage Tube DX Data Extraction

#### E

E Event EAF Expeditionary Air Field; Experimental Analysis Form EAM Emergency Action Messages **EAP** Emergency Action Procedures EAS Engine Alternatives Study EC Engineering Change; Evaluation Center EC-121 Electronic Surveillance Aircraft **ECCM** Electronic Counter-Countermeasures **ECLIPS** Expanded Calculator Link Information Processing **ECM** Electronic Countermeasures (Active) **ECMD** Enemy Cruise Missiles Defeated ECMU Extended Core Memory Unit **ECP** Engineering Change Proposal **ECT** Estimated Completion Time EDD Engagement Data Display **EDE** Environmental Data Entry E/E Entry/Egress **EEFI** Essential Elements of Friendly Information EHF Extremely High Frequency EIA Environmental Impact Assessments EIS External Interface Simulator **ELF** Extremely Low Frequency **ELINT** Electronic Intelligence **ELLIP** Ellipse **ELOS** Extended Line of Sight **ELW** Electronic Warfare EM Extended Mission **EMATT** Expendable Mobile ASW Training Target **EMC** Electromagnetic Compatibility **EMCON** Emission Control EMI Electromagnetic Interference EMR Enter Mode Radar EMU Electronic Modular Unit

EOB Electronic Order of Battle

EOOW Engineering Officer of the Watch EOT End of Tape **EP** Estimated Position EPA Extended Planning Annex **EPC** Emergency Preset Console EPL Electronic Intelligence Parameter Limits **EPS** Engineering Performance Standards **EQP** Equipment Status Tableau **ERAPS** Expendable Reliable Acoustic Path Sonobuoy **ERCS** Emergency Rocket Communication System **ERP** Effective Radiated Power ESA Engineering Support Activity ESBL Engine Start Before Launch ESGN Electrically Suspended Gyro **Navigator** ESM Electronic Surveillance Measures (Passive); Electronic Support Measures **ESMOP** Electronic Support Measures Operational Program **ESO** Electronic Supply Office ESR Executive Service Request ETA Estimated Time of Arrival ETD Estimated Time of Departure ETS Engineering Technical Services EW Electronic Warfare EWC Electronic Warfare Coordinator EWEPS Environment/Weapons Effect Prediction System EWS Electronic Warfare System; Electronic Warfare Supervisor **EXCAP** Expanded Capability **EXCOMS** External Communications Subsystem

## F

FABS Forward Active Buoy Screen
FACSFAC Fleet Air Control and
Surveillance Facility
FACT Fast Asymptotic Coherent
Transmission
FADAP Fleet ASW Data Analysis
Program
FASO Fleet Support Origination
FASP Facility for Automated Software
Production
FBM Fleet Ballistic Missile

FBT Fine Bearing Tracker FCA Functional Configuration Audit FCC Fire Control Coordinator; Fleet Command Center FCDSSA Fleet Combat Direction Systems Support Activity FCPS Fleet Ocean Surveillance Information Center Communications Processing Subsystem FCR Fire Control Radar FCRC Federal Contract Research Center FCS Fire Control System FCSC Fire Control System Coordinator FCTCLANT Fleet Combat Training Center, Atlantic FCTCP Fleet Combat Training Center, **Pacific** FD Functional Description FDDI Fiber-Optic Distributed Data Interface FDDS Flag Data Display System FDE Frequency Domain Equalization FDS Fixed Distributed Subsystem F/E Fleet Escort FED Federation FF Frigate FFG Guided Missile Frigate FFK Fixed Function Key FFT Fast Fourier Transform FHLT Force High-Level Terminal FIC Fleet Intelligence Center FICLANT Fleet Intelligence Center, Atlantic FICPAC Fleet Intelligence Center, Pacific FIDU Filtered Input Data Unit FIP Fleet Introduction Program FK Function Key **FLETAC** Fleet Tactical FLIR Forward-Looking Infrared Radar FLIT Frequency Line Integration **Trackers** FLIT/MATE Frequency Line Tracker/Manual Adaptive Target Motion Analysis Evaluator FLTCINC Fleet Commander-in-Chief FLTSATCOM Fleet Satellite Communications

FM Frequency Modulation

FMF Fleet Marine Forces

FMR Financial Management Report FMSO Fleet Material Supply Office **FN** Function FNOC Fleet Numerical Oceanographic FNWC Fleet Numerical Weather Center FOM Figure of Merit FORSTAT Force Status and Identity Report FOSIC Fleet Ocean Surveillance Information Center FOSIF Fleet Ocean Surveillance Information Facility FOTC Force OTH-T Track Coordinator FOT&E Follow-On Test and Evaluation FOV Field of View FPO Firing Petty Officer FQR Functional Qualification Review FOT Formal Qualification Test FR Engine Firing Rate FRAZ Frequency-Azimuth FREQ Frequency FRO Flexible Response Option FROG Functional Requirement Operation FRS Fleet Readiness Squadron FSA Fast/Slow Adapter FSD Full-Scale Development FSK Frequency Shift Keying FTA Fast-Time Analyzer FTC Frequency Translator-Compressor; Force Track Coordinator; False Target Can FTP Functional Test Procedure; Fly to FTV Force Training Video FUR Failure and Unsatisfactory Report FWC Weather Center FWD Forward FP. EX/P Fleet Exercise Publications FY Fiscal Year

## G

GaAsp Gallium Arsenide Phosphate
GACT Graphics Analysis and Correlation
Terminal
GDE General Data Entry

FYDP Five-Year Defense Plan

GEM Generic Engagement Model **GENSER** General Service (Communications) GFCS Gun Fire Control System GM Guided Missile GMF Geometric Mean Frequency GMLS Guided Missile Launching System GMST Defense Intelligence Agency Glossary of Merchant and Ship Types GMT Greenwich Mean Time (Zulu) GNST Defense Intelligence Agency Glossary of Naval Ship Types GP General Purpose GPDC General-Purpose Digital Computer **GPI** Position Indicator GPO Government Printing Office GPSCS General-Purpose Satellite Communications System GRA Government Research Announcement **GRP** Glass-Reinforced Plastic GVD Group View Display

#### H

HACLCS Harpoon Aircraft Command Launch Control Set HALO Harpoon Air-Launched Overthe-Horizon Targeting HALT Higher Away Lower Toward HARM High-Speed Antiradiation Missile HC VERTREP Helicopter; Helo Coordinator **HCU** Helicopter Control Unit **HDR** Header HE High Explosive **HELO** Helicopter **HELOMTWR** Helicopter Long-Range Acoustic System **HERO** Hazards of Electromagnetic Radiation to Ordnance **HESDEP** Helicopter Sensor Development Program **HESM** Helicopter Screening Model HF High Frequency **HFDF** High-Frequency Direction Finding HgCdTe Mercury Cadmium Telluride HIFR Helicopter In-Flight Refueling HIP Hardware Integration Program

HIT High-Interest Target **HLA** Horizontal Line Array **HLOP** Hyberbolic Line of Position **HLT** High-Level Terminal HM AMCM Helicopter HML Marine Light Assault Helicopter HMM Marine Medium Assault Helicopter HNB Hydrophone Narrowband HOF Hits On Own Force **HOGE** Hover Out of Ground Effect **HOJ** Home On Jamming HOLD Retain in Ambiguity File **HOLT** Retain in Ambiguity File **HOST** Hostile **HOZ** Horizontal **HPAC** High-Pressure Air Compressor **HQ** Headquarters HS Carrier ASW Helicopter; Helicopter ASW Squadron **H&SE** Handling and Storage Equipment **HSIS** Horizontal Situation Indicator HSL LAMPS ASW Helicopter **HSR** Helicopter Supported Radar HST Hauldown, Securing, and Traversing HT Homing Terrier (Missile) HTR Homing Terrier Retrofit; Hardware Trouble Report **HUK** Hunter Killer **HULTEC** Hull-to-Emitter Correlation **HVD** Hub Vortex Dissipator HVU High-Value Unit H/W Hardware **HWCIPO** Harpoon Weapon Control **Indicator Panel Operator** HWS Harpoon Weapon System **HX** Experimental Helicopter HXM Next Generation Marine Medium Assault Helicopter

## I

IAC Interarray Communications
IACS Integrated Acoustics
Communication System
IAD Interarray Display; Integrated
Acoustic Display
IAP Interarray Processor
IAS Indicated Airspeed
IC Intelligence Center

ICAD Integrated Cover and Deception ICAPS Integrated Carrier ASW Prediction System ICDC Improved Control Display Console ICS Integrated Communications System **ID** Identification **IDENT** Identify IDHS Intelligence Data Handling System IDP Individual Development Plan IDS Information and Display System; Interface Design Specification IDWA Interdirectorate Work Agreement IDZ Inner Defense Zone IESS Information Extraction Subsystem I/F Interface IFCC Interim Fleet Command Center IFF Identification, Friend or Foe IFFN Identification, Friend, Foe, or Neutral IFM Instantaneous Frequency Monitoring; Intermediate Frequency Modulation IFPM In-Flight Performance Monitoring IFR Instrument Flight Rules IFT In-Flight Technician IFTAS Interim Fast Time Analyzer System IG Inspector General IID Integrated Information Display IIF Integrated Information Function ILCS Improved Low-Cost Sonobuoy ILS Integrated Logistic Support ILSP ILS Plan IMA Intermediate Maintenance Activity IMC Instrument Meteorological Conditions IMU Inertial Measurement Unit IMRL Individual Material Requirements List IMS Instrumented Measuring System INC Inertial Navigation Computer **INCOS** Integrated Control System INS Inertial Navigation System; Institute of Naval Studies INT Initialization Tableau INTEL Intelligence I/O Input/Output **IO** Inventory Objective

IOA Input/Output Adapter

IOC Initial Operational Capability; Input/Output Controller IOIC Electronics/Integrated Operational Intelligence IOT&E Initial Operational Test and **Evaluation** IP Initial Point IPDMS Improved Point Defense Missile System IPL Initial Program Load **IPS** Integrated Program Summary IPSS Information Processing Subsystem IOS Individual Qualification Standards IR Infrared **IRCM** Infrared Countermeasure IRDS Infrared Detection System IRDTS Infrared Detection and Tracking System IRMLD Infrared Missile Launch Detector IREPS Integrated Refraction Effects Prediction System IRP Interference Rejection Processor; Intermediate Rated Power IRSS Infrared Search Set IS Intelligence Systems; Information System ISA Integrated Support Area ISAR Inverse Synthetic Aperture Radar ISD Initial Search Depth ISE Individual Ship Exercises ISR Identification Safety Range ISS Intelligence Support System ITA Intermediate Time Averaged ITASS Interim Towed Array Surveillance System ITDA Integrated Tactical Decision Aid ITER Improved Triple Ejection Rack **ITERCOMS** Internode Communications Subsystem **ITRACOMS** Intranode Communications Subsystem ITP Integrated Test Package ITSS Improved Tactical Surveillance System IUSS Integrated Undersea Surveillance System: Integrated Underwater Sound System (SOSUS) IVDS Independent Variable-Depth Sonar

IV&V Independent Validation and VerificationI&W Indications and WarningsIWD Intermediate Water Depth (Mine)IXS Information Exchange System

#### J

JCS Joint Chiefs of Staff
JCSM Joint Chiefs of Staff Memorandum
JEZ Jezebel Relay
JIEP Joint Intelligence Estimate for
Planning
JINTACCS Joint Interoperability Tactical
Command and Control System
JLRSA Joint Long-Range Strategic
Appraisal
JMSNS Justification for Major System
New Start
JOOD Junior Officer of the Deck
JOPS Joint Operations Planning System
JOTS Joint Operational Tactical System
JTIDS Joint Tactical Information
Distribution System

## K

KAST Kalman Automatic Sequential Target Motion Analysis KCMX Keyset Control Multiplexer KIAS Knots Indicated Airspeed

## L

LAMBDA Large-Aperture Marine Basic
Data Array
LAMPS Light Airborne Multipurpose
System
LAMPS-MK-III Light Airborne
Multipurpose System Mark-III
LAN Local Area Network
LANTCOM Atlantic Command
LANTFLT U.S. Atlantic Fleet
LAR Launch Acceptability Region
LASCAR Localization and Attack
Systems Characterizations
LAVA Linear Acoustic Vernier Analysis;
Low-Frequency Acoustic Vernier Analyzer
LC Launch Control

LCC Amphibious Command Ship LCCP Launcher Captain Control Panel LCCPO Launcher Captain Control Panel Operator LDMX Local Digital Message Exchange LDR Low Data Rate LEC LAMPS Element Coordinator LF Low Frequency LFA Low Frequency Active LFM Low Frequency Modulation LGB Laser-Guided Bomb LGD Large Group Display LGR LOFAR Gram Recorder LGVD Large Group View Display LHA Amphibious Assault Ship (General Purpose) LICT Longitudinal Induced Compensation Trimmer LIDAR Light Detection and Ranging LINK TIUSS Internode Link LLA Limiting Lines of Approach LLLTV Low-Light-Level Television LLSA Limiting Lines of Surface Approach LLQA Limiting Lines of Quiet Approach LLSUA Limiting Lines of Submerged Approach LMS Lightweight Magnetic Sweep LOB Line of Bearing LOFAR Low-Frequency Analysis and Recording LORA Long-Range Addition LORAN Long-Range Aids to Navigation LOS Line of Sight LPH Amphibious Assault Ship LPI Low Probability of Intercept LR Long Range; Locating Report LRAACA Long-Range Air ASW Capable Aircraft LRASM Long-Range Air-to-Surface Missile LRG Long-Range Guidelines LRI Limited Range Intercept LRM Limited Range Missile LRMP Long-Range Maritime Patrol LRO Long-Range Objectives LSB Lower Sideband LSD Large Screen Display LSI Low Ship Impact

LSNSR Line-of-Bearing Sensor
LSR Line Scan Recorder
L&T Localization and Tracking
LTA Long Time Averaged
LTE Launch-to-Eject
LUNAR Low-Frequency Undersea
Numerical Acoustic Ranging
LUSC Lightweight Undersea Sensor
Component
LWTR Lightweight Infrared (Sensor)

## M

M/A Modeling and Appraisals MAC Military Airlift Command MAD Magnetic Anomaly Detector MADAIR Magnetic Anomaly Detection and Identification Ranging MADC Machine-Assisted Detection and Classification MADTACS MAD Tracking and Compensation Software MADVECS Magnetic Anomaly Detector Vectors MARISAT Maritime Satellite MASE Modified Aft Signal Ejector MASWSP Manager, ASW Systems **Project** MCAR Multichannel Acoustic Relay MCJR Multichannel Jezebel Relay MCM Mine Countermeasures MCP Maintenance Control Panel; Maximum Continuous Power MCU Manual Control Unit; Miniature Command Unit MDL Minimum Detectable Level MDM Magnetic Drum Memory MDR Median Detection Range MDS Minimum Discernible Signal MEC Main Evaluation Center **MODLOC** Modified Location

## N

NBDC Narrowband Detection and Classification NBGATE Narrowband Local Area Network Gateway NBLAN Narrowband Local Area Network NCA National Command Authority NCC Naval Command Center: Naval Component Commander; Network Control Center NCCS Navy Command and Control Systems NCO Net Control Officer NCS Naval Communications System; Naval Control of Shipping; Net Control System **NEARTIP** Near-Term Improvement Program **NESTOR Secure Voice Communication** NFC Numbered Fleet Commander NGFS Naval Gunfire Support NIPS Naval Intelligence Processing System NISC Naval Intelligence Support Center NKP Navigation Keyboard/Printer NL Noise Level NLRG Navy Long-Range Guidance nmi or NM Nautical Mile NMRG Navy Midrange Guidance NMGR Navy Modular Growth Radio **NOBSY** Navai Observatory NOIC Naval Operational Intelligence Center NOMSS Naval Oceanographic and Meteorological Support System NOP Naval Operative Plan NOPF Naval Oceanographic Processing **Facility** NORDA Naval Ocean Research and **Development Activity NORM** Normal Position NOSC Naval Ocean Systems Center NOSIC Naval Ocean Surveillance Information Center **NRO** No Runout NRPF Naval Regional Processing Facility NRT Non-Real Time NS Near Surface NSOF Naval Status of Forces (Data File) NTDS Naval Tactical Data System **NUWES** Naval Underwater Weapons **Engineering Station NWESA** Naval Weapons Engineering Support Activity

NWOC Naval Weather Oceanographic Center NWP Naval Warfare Publication

#### 0

OA Operational Assembly **OBS** Omnibearing Selector; OSIS Baseline System **OBU** OSIS Baseline Upgrade **ODT** Omnidirectional Transmission **OEG** Operations Evaluation Group OMAT Ocean Measurements and Array Technology Program **OMI** Operator Machine Interface **OMS** Optimum Mode Selection OOA Out of Action OOB Order of Battle OOD Officer of the Deck **OP CDR** Operations Commander **OPCON** Operational Control **OPDEC** Operational Deception **OPEVAL** Operational Evaluation **OPGEN** Operation Generation **OPINTEL** Operational Intelligence **OPLAN** Operational Plan **OPNOTES** Operational Notes **OPORD** Operating Orders **OPORDER** Operation Order **OPS** Operations **OPTEVFOR** Operational Test and **Evaluation Force OR** Operational Requirement **ORATS** Operational Readiness Assessment and Training System **ORDALT** Ordnance Alteration OSDHT Own-Ship Data History Table **ORI** Operational Readiness Inspection OS Operating System OSI Open Systems Interconnection OSIS Ocean Surveillance Information OSP Ocean Surveillance Product **OSS Optimum Sonar Speed** OTC Officer in Tactical Command OTCIXS Officer in Tactical Command Information Exchange Subsystem OT&E Operational Test and Evaluation **OTF** Optimum Traffic Frequency

OTH Over the Horizon
OTH-DA Over-the-Horizon Damage
Assessment
OTH/DCT Over-the-Horizon Detection,
Classification, and Targeting
OTH-T Over-the-Horizon Targeting
OTMS Operational Technical
Management System
OTPI On-Top Position Indicator
OTS Over the Side
OUTBOARD Shipboard Tactical Signals
Exploitation/Direction Finding System

#### P

P-3C A Land-Based, Fixed-Wing Patrol Aircraft, ASW PA Periscope Assistant; Probability of Attack PAC Passive Acoustic Classification PACLOC Passive Acoustic Classification PAD Passive Acoustic Detection PADS Passive Advanced Sonobuoy PAIR Performance and Integration Retrofit **PBB** Passive Broadband **PCOTES** Prototype Carrier Operational T&E Site PD Probability of Detection PDC Practice Depth Charge; Probability of Detection and Conversion PDIP Preflight Data-Insertion Program PDIT Preflight Data-Insertion Tape PDM Point Defense Missile PDPC Post-Detection Pulse Compression PDR Periscope Depth Range PDS Passive Detection System; Pulse Doppler Search PDT Processed Directional Transmission: Passive Detection and Tracking PE Parabolic Equation PEC Passive Equipment Cabinet PEP Performance Evaluation and Prediction Program (SOSUS) PERT/CPM Program Evaluation Review Technique/Critical Path Method PF Patrol Frigate PFA Probability of False Alarm PFN Pulse Forming Network

PG Patrol Gunboats PGG Guided Missile Patrol Boat **PGGX** Future Guided Missile Patrol Boat PHIT Probability of Hit PHITAR Predesignated High-Interest Target Area PHOTINT Photographic Intelligence PI Performance Index PI/PE Passive Identification and **Detection Equipment** PIM Position and Intended Movement PIRAZ Positive Identification Radar Advisory Zone PK Position Keeping; Probability of Kill PL Probability of Localization; Position Launch; Propagation Loss PLBOL Position Launch/Bearing Only PLE Prudent Limit of Endurance PLX Position Launch Search Mode PM/FD/FL Performance Monitoring/Fault Detection/Fault Location PM/FL Performance Monitoring/Fault PMOP Phase Modulation on Pulse PMTC Pacific Missile Test Center PNB Passive Narrowband **POE** Projected Operational Environments POM Program Objectives Memorandum **POS** Position **POSCOR** Position Corrected **POSSUB** Possible Submarine POST Prototype Ocean Surveillance **Terminal PPI** Plan Position Indicator **PPS** Program Performance Specifications PR Passive Recording; Problem Report PRD Predicted Range of the Day PREOS Prediction of Range for **Electro-Optical Systems** PRF Pulse Repetition Frequency PRI Pulse Repetition Interval; Pulse Rate Indicator **PRITAC** Primary Tactical Circuit PRO Passive Recorder Operator PROBSUB Probable Submarine Contact **PROP** Propulsion PROTDA Protection Probability for

Avoidance Ship/Actual

PRP Pulse Repetition Period PRR Pulse Repetition Rate PS Power Supply PSA Persistent Search and Attack PSLT Pressurized Sonobuoy Launch Tube P SNSR Position Sensor **PSP** Programmable Signal Processor PSR Predicted Sonar Range PSSK Probability of Single-Shot Kill PTA Passive Tracking Algorithm PTFG Guided Missile Fast Patrol Boat PTG Fast Patrol Craft PTGHX Future Fast Patrol Craft (Hydrofoil) PTR Program Trouble Report PU Participating Unit (Data Link) PUCR Preprogrammed Underwater Communications Receiver PW Pulse Width

## Q

QRC Quick Reaction Capability

## R

R Range RAC Radar Azimuth Converter RACC Regional ASW Command Center **RACKET TESM Report of Unidentified** or Potentially Hostile Emitted **RAD** Radar RADAR Radio Detecting and Ranging **RADIST** Radar Distance Navigator RAP Reliable Acoustic Path **RAPLOC** Rapid Passive Localization RAST Recovery Assist, Securing, and Traversing RBL Range and Bearing Launch **RCU** Remote Control Unit **RD** Recognition Differential RDBMS Raw (Acoustic) Data Base Management System **RDC** Remote Data Collector RDSS Rapidly Deployable Surveillance System; Remotely Deployed Sensor System **RDT** Rotating Directional Transmission

**REMRO** Remote Radar Operator **RESA** Research Evaluation and Systems **Analysis REWSON** Reconnaissance. Electronic Warfare, Special Operations, and Naval Intelligence Systems RF Required Function; Radio Frequency RH Radar Horizon RIG Recognition and Intelligence Groups RIU Radar Interface Unit RL Target Range at Launch RMI Radio Magnetic Indicator RMS Root Mean Squared **RO** Range Only **ROA** Radius of Action **ROC** Required Operational Capabilities ROD Range of the Day **ROE** Rules of Engagement **ROF** Required Operational Function ROM Read-Only Memory **ROMS** Remote Ocean Surface Measuring System ROTH-R Relocatable Over-the-Horizon Radar **ROU** Radius of Uncertainty **RT** Realtime RTDC Rocket Thrown Depth Charge RTSP Real Time Signal Processor

## S

SA Spectrum Analyzer; Surface to Air SAC Scene-of-Action Commander; Strategic Air Command SACC Shore Antisubmarine Warfare Command Center SAD Submarine Anomaly Distribution SADR Secure Acoustic Data Relay SADS Submarine Active Detection System SAG Surface Action Group SAM Surface-to-Air Missile SAOCS Submarine/Air Optical Communication System SAR Search and Rescue SASP Single Advanced Signal Processor SAT Site Acceptance Test **SATCOM Satellite Communications** SAU Search/Attack Unit

SAWS Submarine Acoustic Warfare System SC Screen Coordinator SCAM Subsonic Cruise Armed Missile/Decov SCAT Surveillance, Communication, ASMD Warning, and Targeting SCI Ship Controlled Intercept (Radar); Sensitive Compartmented Information SCC Spare Computer Channel SCDO Surface Channel Display Operator **SCM** Semiconductor Module SC/PPU System Controller/Post-Processor SDC Signal Data Converter; Sonar Data Computer SDDP Shipboard Display Data Processor SDP Shipboard Data Processor SDR Signal Data Recorder; Surface Duct Receiver SDR/RS Signal Data Recorder/Reproducer SDS Surveillance Direction System SD/T Surface Detector/Tracker SE Signal Excess SEAMIX Sea Control Force Mix Study **SEAS** Surveillance Environmental Acoustic Support **SEATAC Sea Control Tactical** Effectiveness Study SEC Submarine Element Coordinator **SELOR** Ship Emitter Location Report SES Ship-Based Electronics Subsystem SETAD Secure Electronic Transmission of Acoustic Data SF Sonobuoy Frequency SHAREM Ship ASW Readiness/Effectiveness Measurement SHARPS Ship-Helicopter Acoustic Range Prediction System SHF Super-High Frequency SHP Shaft Horsepower SI Sensitive Information; Special Intelligence: Signal Interference SIAS Submarine Integrated Antenna System SID Software Interface Document SIGINT Signal Intelligence

**SIGSEC** Signature Security SIM Submarine Intended Movement SIMAS Sonar In Situ Mode Assessment System SINS Sensor Interface Unit; Ships Inertial Navigation System SIRCS Shipboard Intermediate Range Combat System **SITREP** Situation Report SIU Sensor Interface Unit SKUNK Surface Contact Known or Assumed to be Enemy SL Source Level SLAM Short LOFAR Alerting Message SLAT Surface-Launched Air Targeted Missile SLATE Submarine-Launched Air Targeted Missile **SLCM** Submarine-Launched Cruise Missile SLCR Software Level Change Request SLD Sonic Layer Depth SLMM Submarine-Launched Mobile Mine SLOC Sea Line of Communication SLOT Submarine-Launched, One-Way Tactical (Buoy) SLT Sonobuoy Launch Tube S/N Signal/Noise SNR Signal-to-Noise Ratio **SO** Sensor Operator SOA Speed of Advance **SOCC** Submarine Operations Control Center SODL Submarine Operational Data Link **SOE** Summary of Engagements **SOFAR** Sound Fixing and Ranging SOP System Operational Procedure **SOSEX SOSUS Exercise** SOSS Soviet Ocean Surveillance System SOSUS Sound Surveillance Underwater System SOTA Surveillance Oceanographic Towed SP Sound-Powered SPA SOSUS Probability Area SPARS System for the Prediction of Acoustic Response of Sensors

SPASM Sensor Platform Analytic Scenario Model SPAWARSYSCOM Space and Naval Warfare Systems Command SPEAR Signal Processing, Evaluation, Alert and Reporting SPIE Ship Precise Identification by **Emitter** SPL Sound Pressure Level SPZ Submarine Patrol Zone SRL Sonobuoy Receiver Logic SRP Sonobuoy Reference Positioning (Equipment) SRS Sonobuoy Reference System SRX Sonobuov Receiver SS Submarine (Attack); Sensor Station SSAN Auxiliary Nuclear Submarine SSAP Submarine Sonar Adaptive **Processor** SSATS Surface Ship Acoustic Tactical System (SQR-891) SSB Ballistic Missile Submarine SSBN Ballistic Missile Submarine (Nuclear) SSES Ships Signal Exploitation System SSG Guided Missile Submarine SSGN Guided Missile Submarine (Nuclear) SSGNX Future Guided Missile Submarine (Nuclear) SSGX Future Submarine Guided Missile **SSIP** Submarine Sonar Improvement **Program** SSIXS Submarine Satellite Information Exchange Subsystem SSK Killer Submarine (ASW) SSM Surface-to-Surface Missile SSMG Ship Service Motor Generator SSN Nuclear Attack Submarine SSN(DS) Nuclear Attack Submarine in **Direct Support** SSP Sound Speed Profile; Shipboard Signal Processor SSPCP Shipboard Signal Processor Computer Program SSPS Sonar Signal Processing System SSS Surface, Subsurface Surveillance; Strategic Satellite System

SSSC Surface/Subsurface Surveillance Coordinator SST Sea Surface Temperature SSTD Surface Ship Torpedo Defense SSTG Ship Service Turbo Generator SSWC Surface. Subsurface Warfare Coordinator SSXBT Submarine Expendable Bathythermograph STA Short Time Averaged STANAG Standard NATO Guidelines STASS Submarine Towed-Array Sonar STDL Submarine Tactical Data Link STIC Surveillance Test and Integration STIZ Submarine Transit Identification Zone STOL Short Takeoff and Landing STR Software Trouble Report STS Ship to Shore; Satellite Tracking System STT Shore Targeting Terminal STW Strike Warfare STWC Strike Warfare Commander SUBACS Submarine Advanced Combat System SUBASWEX Submarine ASW Exercise **SUBNOTE** Submarine Notice **SUBOPAUTH** Submarine Operating Authority SUBRAP Submarine Sonar Range **Prediction System** SUBROC Submarine-Launched Antisubmarine Rocket SUBSAM Subsurface-to-Air Missile **SUBTYP** Submarine Type **SURTASS** Surveillance Towed-Array Sensor System; Surface Towed-Array Sonar System **SURTOPS** Surveillance Training and Operating Procedures Standardization SUS Sound Underwater Signals **SUW** Surface Warfare SUWC Surface Warfare Coordinator S&V Survivability and Vulnerability **SVCS** Secure Voice Communications System

**SVP** Sound Velocity Profile

SVTT Surface Vessel Torpedo Tube
SW Switch, Short Wave
SWATS Shallow Water Acoustic Track
System
SWC Ship Weapon Coordinator
SWO Surface Watch Officer
SWOP Special Weapons Ordinance
Publication
SWRT Sound Wave Ray Track
SWS Strategic Weapons System
SZ Surface Zero

#### T

TABP Towed-Array Broadband **Processing** TAC Tactical, Tactical Air Coordinator TACAIR Tactical Air TACAIRPOD Tactical Aircraft ASW Pod TACAN Tactical Air Navigation TACC Tactical Air Command Center **TACCO** Tactical Coordinator **TACCOM Tactical Communications** TAC D&E Tactical Development and **Evaluation** TACEVAL Tactical Evaluator TACINTEL Tactical Intelligence **TACNAV** Tactical Navigation TACNUC Tactical Nuclear Weapon TACO Tactical Coordinator TACRAPS Tactical Range Prediction System **TACSATCOM** Tactical Satellite Communication TACTAS Tactical Towed-Array Sonar TADCOM Tactical Air Data Communications Link TADIL Tactical Digital Information Link **TADIXS** Tactical Automated Data Information; Exchange Subsystem TAEAS Tactical ASW Environmental **Acoustic Support** TAG Tactical Analysis Group

T-AGOS Auxiliary Ocean Surveillance Ship TAO Tactical Action Officer TAP Transient Acoustic Processor TART Tartar (Missile)

TASDA Tactical Airborne Sonar Decision Aid TASM TOMAHAWK Antiship Missile TASS Towed-Array Surveillance System TASSRAP TASS Range Prediction System TBR Time Bearing Recorder TC3 Tactical Command, Control, and Communications TCG Time Code Generator TCM Torpedo Countermeasure TCP Torpedo Control Panel TCP/IP Transmission Control Protocol/Internet Protocol TDA Tactical Decision Aid: Torpedo Danger Area TDB Tactical Data Base or Track Data Base TDBMS Textual Data Base Management TDD Target Detection Device; Tactical Data Display TDI Target Doppler Indicator TDP Target Data Processor TDS Tactical Display System **TDT** Target Designation Transmitter TDZ Torpedo Danger Zone **TELCOM** Telemetered Communications TERCOM Terrain Contour Matching **TESS Tactical Environmental Support** System **TEXAS** Tactical Exchange Automation TF/TG Task Force/Task Group TFCC Tactical Flag Command Center TFR Test Failure Report **TGT** Targeting TH True Heading TIDU Tagged Input Data Unit TIF Threat Importance Factor TLAM TOMAHAWK Land Attack Missile TLCF TACINTEL (Tactical Intelligence) Link Control Facility TLR Top-Level Requirements TLS Top-Level Specifications TLTA Thin-Line Towed Array TLWR Top-Level Warfare Requirements TMA Target Motion Analysis

TMP Tactical Mission Program

TMT Total Mission Time TOE Time of Event TOR Tactical Operational Requirement; Test Observation Report TPA TASS Probability Area TPO Tracking Petty Officer TPK Turns per Knot TR Trouble Report T/R Transceiver; Transmit-Receive TRAM Target Recognition Attack Multisensor TRIASP Triple Advanced Signal Processor TRP Threat Recognition Processor TS Target Strength TSAM TARTAR, TERRIER, or TALOS Surface-to-Air Missile TSC Tactical Support Center TSCTN TSC Track Number TSCIXS Tactical Support Center Information Exchange Subsystem TSES Tactical Signals Exploitation System TSP Torpedo Setting Panel TSR Tactical Sonar Range TSS Tactical Surveillance System TSTS TOMAHAWK System Test Set TTC Tape Transport Cartridge; Target Tracking Console TTCO Target Tracking Console Operator TTY Teletypewriter

#### H

**UAV** Unmanned Air Vehicle **UB** Underwater Battery **UBFC** Underwater Battery Fire Control **UBFCS** Underwater Battery Fire Control UBS Underwater Battery Supervisor **UCLIPS** Upgraded Calculator Link Information Processing System **UCP** Universal Communications Processor UFCS Underwater Fire Control System UFCSO Underwater Fire Control System Officer UHF Ultrahigh Frequency (300-3000 MHz) **UHFSATCOM** Ultrahigh Frequency Satellite Communications UKL Universal Keyset Logic

UNODIR Unless Otherwise Directed
UNREP Underway Replenishment
UPS Uninterrupted Power Source
UQC Underwater Telephone
URG Underway Replenishment Group
URNH Soviet Union Naval, Hostile
USAF United States Air Force
USB Upper Sideband
USMC United States Marine Corps
USW Undersea Warfare
UTTAS Utility Tactical Transport Aircraft
System
UVC Underwater Voice Communications
UWC Underwater Communications

#### $\mathbf{V}$

Landing

VDS Variable Depth Sonar VDAS Vernier DIFAR Acoustic System VDL Video Data Link VDR Variable Depression Receiver VDS Variable Depth Sonar VDT Variable Depression Transmission **VECTAC** Vectored Attack **VERTREP** Vertical Replenishment VET Target Mean Velocity East VF Fighter Aircraft VHF Very High Frequency VIM Vibration Isolation Module VIP Visual Image Processor VLA Vertical Launch ASROC VLAD Vertical Line Array Directional Low-Frequency Analysis and Recording (DIFAR) VLF Very Low Frequency VLR Very Long Range VLS Vertical Launch System VMAP Variable Mission Aircraft Platform VNT Target Mean Velocity North **VOD** Vertical On-Board Delivery VOR Very High Frequency Omnirange VP Fixed-Wing, Land-Based ASW Aircraft VQ Fleet Air Reconnaissance Squadron VRD Visual Recognition Differential VS Fixed-Wing, Sea-Based ASW Aircraft V/STOL Vertical/Short Takeoff and

VTOL Vertical Takeoff and Landing

## W

WAA Wide-Aperture Array WAP Wideband Acoustic Processor WAS War at Sea WB Wideband WBAR Wideband Acoustic Recall WBGATE Wideband Local Area Network Gateway WBLAN Wideband Local Area Network WCC Weapon Control Console WCP Weapon Control Panel WDC Weapon Data Converter WDE Weapon Direction Equipment WDI Weapon Delivery Impairment WDS Weapon Direction System WEC Weapon Engagement Coordinator WF Waterfall WFAD Wide-Frequency Analyzer and Display WH Warhead WIF Weapon Interface Function WLC Weapons Launch Console WMP Weapon Monitor Panel WNINTEL Warning Notice-Intelligence Sources and Methods Involved WRA Weapon Replacement Assembly WRKSTN Advanced Surveillance Workstation WS Weapon System WSAT Weapon System Accuracy Trials WSEF Weapons System Effectiveness WSIG Weapons Support Improvement WSIP Weapons Support Improvement Program WSPD Weapons System Planning Data WSS Warfare Support System WWMCCS Worldwide Military Command and Control System



**XLATE** Translate

## **REPORT DOCUMENTATION PAGE**

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and

suggestions for reducing this burden, to Wa	ing and reviewing the collection of information. Send c ishington Headquarters Services, Directorate for infor iget, Paperwork Reduction Project (0704-0188), Was	mation Operations and Reports, 1215 Jefferson Davis I	aspect of this collection of information, including riighway, Suite 1204, Arlington, VA 22202-4302,	
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE		PE AND DATES COVERED	
To Produce to the Control of the Con	January 1990	Final		
4. TITLE AND SUBTITLE	<u> </u>	5. FUNDING N	UMBERS	
ANTISUBMARINE WARFA	ARE (ASW) LEXICON	In-house	funds	
6. AUTHOR(S)				
C. H. Gates				
7. PERFORMING ORGANIZATION NAME(S	i) AND ADDRESS(ES)	8. PERFORMIN REPORT NUI	G ORGANIZATION MBER	
Naval Ocean Systems Cente San Diego, CA 92152-5000	r	NOSC T	NOSC TD 1727	
9. SPONSORING/MONITORING AGENCY N	NAME(S) AND ADDRESS(ES)	10. SPONSORIF AGENCY R	NG/MONITORING EPORT NUMBER	
Naval Ocean Systems Cente San Diego, CA 92152-5000	ा			
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION/AVAILABILITY STATEM	MENT	12b. DISTRIBUT	TION CODE	
Approved for public release;	distribution is unlimited.			
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13. ABSTRACT (Maximum 200 words)				
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14. SUBJECT TERMS			15. NUMBER OF PAGES	
			37	
antisubmarine warfare			16. PRICE CODE	
17. SECURITY CLASSIFICATION	18. SECURITY CLASSIFICATION	19. SECURITY CLASSIFICATION	20. LIMITATION OF ABSTRACT	
OF REPORT UNCLASSIFIED	OF THIS PAGE UNCLASSIFIED	UNCLASSIFIED	SAME AS REPORT	